

## REMARKS

The undersigned appreciates the telephonic interview granted by the examiner on November 2, 2004, and the following is a summary of the interview. During the interview, claim 14 was discussed by reference to Figs. 1 and 2a of the present application for an explanation of the operation of the invention. The examiner explained that claim 14 was broad, and as written, read on by U.S. Patent 5,764,225 to Koshobu. The undersigned related that he intended to further amend claim 14 to emphasize certain features of the invention and distinguish over prior art.

The undersigned appreciates the indication that Claims 1-11, 13, 25-29, 31-39 and 41-46 have been allowed.

Claims 14-22, 47 and 48 are rejected under 35 U.S.C. 103a as being unpatentable over U.S. Patent 6,262,704 to *Kurumisawa et al.* in view of U.S. Patent 5,764,225 to *Koshobu*. Claims 14-16, 22, 47 and 48 have been cancelled, and new claims 49-63 have been added. The rejection is respectfully traversed insofar as it is applied to the amended and new claims.

The Examiner is of the opinion that “*Kurumisawa* teaches how at least one of the electrical potentials supplied to the display matrix floats with a voltage supplied by electrically isolating the matrix”, referring to Column 20, Lines 55-63 and Column 21, Lines 21-28 and Figures 34A and 34B of *Kurumisawa*. To the extent that the same reasoning is applied to the new claim 49 pertaining to the pulling of potentials by outputs of power sources, we respectfully disagree.

As noted by *Kurumisawa*, in Column 21, Lines 16-20, at least one of the switches 711, 726 is open during a high-impedance mode. The current path is, therefore, disconnected and unnecessary current never flows. This reduces power consumption. Since at least one of the switches 711, 726 is open, whatever voltage that may be present on the scanning lines or the data lines connected to the switches cannot change with any other voltage or voltage range. *Kurumisawa*, in Column 21, Lines 29-34, continues: “In the liquid-crystal panel shown in FIG. 34A, switches 711.about.716 within switch means 710 and switches 721.about.726 within switch means 720 are all opened. Therefore, the scanning lines L1.about.L6 and the data lines S1.about.S6 are all set to an electrically floating state.” In other words, the current paths through these switches and therefore

through all of the scanning lines and the data lines connected to the switches in the liquid-crystal panel shown in FIG. 34A are disconnected from any power source or voltage and unnecessary current never flows through them, so that the voltages on these lines cannot change with any other voltage or voltage range. Therefore, contrary to the opinion of the Examiner, the so-called “electrical potentials supplied to the display matrix” in *Kurumisawa* do not float with and is not pulled by any other voltage, since no electrical potentials are supplied to the display matrix in the first place in the sections of *Kurumisawa* relied on by the examiner in the rejection.

Claim 14 has been cancelled, and new claim 49 presented instead. Claim 49 clearly distinguishes over Koshobu. In claim 49, a circuit generates the driving voltages for driving the row and column electrodes from power source output(s), the driving voltages being different from the output(s), where the driving voltages generated during a first cycle of the periodic field addressing cycles are different from those generated during a second cycle. Koshobu fails to teach or suggest such feature. In Koshobu, there is no difference between the driving voltages that is generated by the power supplies 70 and 80 or by supply circuits 40 and 50 over different periodic field addressing cycles. In Figs. 2A-2D, and in Figs. 4A-4D, for example, the driving voltages generated over two successive field addressing cycles (VEE1, VSS1, Vwp, Vhp, Ve, Vhn, Vwn) remain substantially the same.

Furthermore, claim 49 requires that “said voltages generated during the first cycle together with the outputs spanning a first voltage range, and said voltages generated during the second cycle together with the outputs spanning a second voltage range being different and distinct from the first voltage range.” This is illustrated, in one embodiment, in Fig. 2a, in reference to the voltage ranges shown for two successive fields ( $2xN$  and  $2xN+1$ ). This is not true at all in Koshobu, where the driving voltages plus outputs of supplies 70, 80 (VEE1, VSS1, Vwp, Vhp, Ve, Vhn, Vwn) remain substantially the same over successive and different field addressing cycles.

Moreover, claim 49 requires that “at least two of the driving voltages are generated substantially simultaneously by being pulled to potentials that differ from the power source outputs by predetermined potential difference values.” This feature is likewise absent altogether from Koshobu. Claim 55 also contain limitations that are not

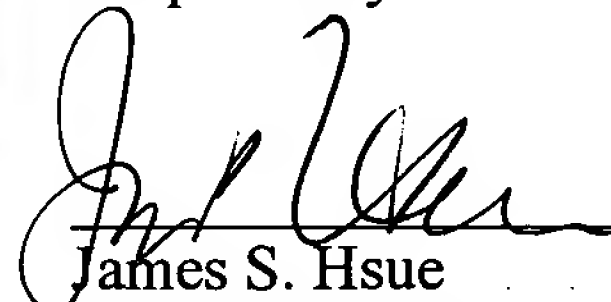
taught or suggested by Koshobu, such as the use of an energy storage for generating the driving voltages and the fact that the driving voltages generated during a first cycle of the field addressing cycles are different from driving voltages generated during a preceding or succeeding second field addressing cycle. Claim 55 is therefore patentable over Koshobu and any other art of record.

Claims 50-54 and 56-63 have been added to more adequately cover the invention. These claims also contain limitations that are not taught or suggested by Koshobu, or any other art of record. Claims 17-21 have also been amended to depend from claim 49 or its dependent claims. These claims are believed to be allowable since they depend from claim 49, and further in view of the limitations therein. Koshobu fails to teach to suggest such limitations.

Claims 1-11, 13, 17-21, 25-29, 31-39, 41-46 and 49-63 are presently pending in the Application. Reconsideration of the rejections is respectfully requested and an early indication of the allowability of all the Claims is earnestly solicited.

EXPRESS MAIL LABEL EV. 437669240 US

Respectfully submitted,

  
James S. Hsue  
Reg. No. 29,545

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Date